

(19)



(11)

EP 2 250 904 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

17.11.2010 Bulletin 2010/46

(51) Int Cl.:

A01N 65/00 *(2009.01)*

A01P 17/00 *(2006.01)*

A01N 25/02 *(2006.01)*

(21) Application number: **10004992.3**

(22) Date of filing: **12.05.2010**

(84) Designated Contracting States:

**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO SE SI SK SM TR**

Designated Extension States:

BA ME RS

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(30) Priority: **14.05.2009 CH 7562009**

(54) **Liquid valuable wood oil-based mothproofing composition**

(57) A liquid room deodorizing composition having a mothproofing effect, characterized in that it is based on natural scented oils and valuable wood oils.

EP 2 250 904 A1

Description

[0001] The present invention relates to a liquid composition which is **characterized in that** it is solely composed of scented substances, most of which are valuable wood oils, whose combination also has a powerful mothproofing effect.

[0002] The composition of the invention finds application in the field of products having a moth repellent effect, i.e. those products that release for a given time moth repelling vapors, because of their highly irritating effect for these insects.

[0003] Prior art mothproofing compositions release vapors that may be generated by either evaporation or sublimation of substances that are part of the composition, which may be of either natural or synthetic nature.

[0004] If these products are synthetic, the vapors they release usually has a toxic effect on moths, which generally die in an atmosphere saturated with these vapors, for example in a wardrobe.

[0005] Nonetheless this effect also occurs, although to a much lower extent, in people that inhale these vapors and may induce allergic reactions in particularly sensitive individuals.

[0006] Are also known composition which are based on natural products, such as citronella, lavender, or clove oils, which are used either alone or in combinations.

[0007] These compositions have not been particularly appreciated by the public, due to their mild and short-lasting effect, and to the consequent need of using the product in high concentrations or frequently replacing it, which is not a cost effective feature.

[0008] The present invention finds application in this field, and provides a mothproofing composition based on natural substances, which composition has a strong moth repelling effect in spite of its pleasant scent.

[0009] The composition of the invention, as mentioned above, is composed of scented substances only, particularly, substances occurring in nature, and in which most of the components are valuable wood essential oils.

[0010] Using these components, the present inventor developed a composition that is more effective than most of prior art products, ensures a good deodorizing effect and acts as a powerful mothproof.

[0011] The compound of the present invention has the following compositions, with the parts being expressed by weight:

Cedrenyl acetate	0.1 to 2 parts per thousand
Eugenyl acetate	0.1 to 3 parts per thousand
Acetophenone	0.001 to 1 parts per thousand
Anisic aldehyde	0.1 to 3 parts per thousand
Methyl cinnamic aldehyde	0.1 to 3 parts per thousand
Benzyl benzoate	0.1 to 50 parts per thousand
Cedryl methyl ether	0.1 to 20 parts per thousand
Atlas cedarwood essential oil	0.01 to 5 parts per thousand
Cedrol	0.1 to 5 parts per thousand
Cis-3-Hexenol	0.0001 to 1 parts per thousand
Triethyl citrate	0.1 to 1 parts per thousand
Citronellol	0.001 to 1 parts per thousand
Coriander oil	0.1 to 2 parts per thousand
Coumarin	0.1 to 3 parts per thousand
Delta-damascone	0.01 to 1 parts per thousand
Methyl dehydro jasmonate	0.01 to 1 parts per thousand
Dihydromircenol	1 to 40 parts per thousand
Dipropylene glycol	0.1 to 10 parts per thousand
1-(5,5-dimethyl-cyclohexane-1-yl)pent-4-en-1-one	0.0001 to 1 parts per thousand
3-methyl-5-(2,2,3-trimethyl-3-cyclopentane-1-yl)-4-penten-2-ol	0.1 to 2 parts per thousand
Eugenol	0.1 to 3 parts per thousand
Iso-longipholanone	0.1 to 3 parts per thousand
Lavandin essential oil	0.1 to 5 parts per thousand
Methyl atrarate	0.0001 to 1 parts per thousand
Nutmeg oil	0.01 to 1 parts per thousand
2-methyl-4-propyl-1,3-oxathiane(z)	0.001 to 1 parts per thousand
Oxide rose L	0.0001 to 1 parts per thousand
Para-mentha-8-thiol-3-one	0.00001 to 0.1 parts per thousand
Patchouli essential oil	0.1 to 25 parts per thousand

EP 2 250 904 A1

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	Alpha-pinene	0.0001 to 1 parts per thousand
	Beta-pinene	0.01 to 1 parts per thousand
5	Ethyl vanillin	0.01 to 1 parts per thousand
	3,4,4a,5,8,8°-hydrohexa-3',7'-dimethylspiro(1,4-methano phthalene-2(1h)2'6 oxirane)	0.005 to 0.1 parts per thousand
	Dimethyl cyclo hex-3-ene- 1-carboxaldehyde	0.001 to 0.1 parts per thousand
10	2,2,5-trimethyl-5-pentyl-cyclopentanone	0.001 to 0.1 parts per thousand
	Maltol	0.01 to 1 parts per thousand

Among the mixtures that have been tested by the Applicant, the one that yielded the best results was as follows:

15	• Cedrenyl acetate	1
	• Eugenyl acetate	1.4
	• Acetophenone	0.06
	• Anisic aldehyde	1.2
	• Methyl cinnamic aldehyde	1.6
20	• Benzyl benzoate	30.2
	• Cedryl Methyl Ether	11
	• Atlas cedarwood oil	0.5
	• Cedrol	2.5
25	• Cis-3-Hexenol	0.0003
	• Triethyl citrate	0.24
	• Citronellol	0.03
	• Coriander oil	0.8
	• Coumarin	1.6
30	• Delta-damascone	0.2
	• Methyl dehydro jasmonate	0.14
	• Dihydromircenol	20
	• Dipropylene glycol	6.957
35	• 1-(5.5-dimethyl-cyclohexane-1-yl)pent-4-en-1-one	0.0015
	• 3-methyl-5-(2.2.3-trimethyl-3-cyclopentane-1-yl)-4-penten-2-ol	0.6
	• Eugenol	1.5
	• Iso-longipholanone	1.4
	• Lavandin essential oil	2
40	• Methyl atrarate	0.003
	• Nutmeg oil	0.1
	• 2-methyl-4-propyl-1.3-oxathiane(z)	0.012
	• Oxide rose L 0.0015	
45	• Para-mentha-8-thiol-3-one	0.0001
	• Patchouli essential oil	14
	• Alpha-pinene	0.005
	• Beta-pinene	0.1
	• Ethyl vanillin	0.6
50	• 3.4.4a.5.8.8°-hydrohexa-3'.7'-dimethylspiro(1.4-methano phthalene- 2(1h)2'6 oxirane)	0.015
	• Dimethyl cyclo hex-3-ene-1-carboxaldehyde	0.013
	• 2.2.5-trimethyl-5-pentyl-cyclopentanone	0.015
	• Maltol	0.2066

55 According to a preferred embodiment, absorbent paper is used as a substrate for the composition, which is produced in the liquid state, which substrate being impregnated with the composition.

[0012] Nevertheless, other types of substrates may be used, as long as they have adequate porosity and formability,

to obtain the most appropriate shapes for each application.

[0013] The substances included in the composition have been listed with the trade name with which they are known, not only by their manufacturers but also by those skilled in the art.

[0014] The skilled persons may also envisage changes and variants to the above, which shall be intended to be included in the scope of the invention.

Claims

1. A liquid room deodorizing composition having a moth-proofing effect, **characterized in that** it is based on natural scented oils, in this case valuable wood oils.

2. A moth-proofing composition as for claim 1, **characterized in that** it includes the following formulation, with parts expressed by weight

Cedrenyl acetate	0.1 to 2 parts per thousand
Eugenyl acetate	0.1 to 3 parts per thousand
Acetophenone	0.001 to 1 parts per thousand
Anisic aldehyde	0.1 to 3 parts per thousand
Methyl cinnamic aldehyde	0.1 to 3 parts per thousand
Benzyl benzoate	0.1 to 50 parts per thousand
Cedryl Methyl Ether	0.1 to 20 parts per thousand
Atlas cedarwood oil	0.01 to 5 parts per thousand
Cedrol	0.1 to 5 parts per thousand
Cis-3-Hexenol	0.0001 to 1 parts per thousand
Triethyl citrate	0.1 to 1 parts per thousand
Citronellol	0.001 to 1 parts per thousand
Coriander oil	0.1 to 2 parts per thousand
Coumarin	0.1 to 3 parts per thousand
Delta-damascone	0.01 to 1 parts per thousand
Methyl dehydro jasmonate	0.01 to 1 parts per thousand
Dihydromircenol	1 to 40 parts per thousand
Dipropylene glycol	0.1 to 10 parts per thousand
1-(5,5-dimethyl-cyclohexane-1-yl)pent-4-en-1-one	0.0001 to 1 parts per thousand
3-methyl-5-(2,2,3-trimethyl-3-cyclopentane-1-yl)-4-penten-2-ol	0.1 to 2 parts per thousand
Eugenol	0.1 to 3 parts per thousand
Iso-longipholanone	0.1 to 3 parts per thousand
Lavandin essential oil	0.1 to 5 parts per thousand
Methyl atrarate	0.0001 to 1 parts per thousand
Nutmeg oil	0.01 to 1 parts per thousand
2-methyl-4-propyl-1,3-oxathiane(z)	0.001 to 1 parts per thousand
Oxide rose L	0.0001 to 1 parts per thousand
Para-mentha-8-thiol-3-one	0.00001 to 0.1 parts per thousand
Patchouli essential oil	0.1 to 25 parts per thousand
Alpha-pinene	0.0001 to 1 parts per thousand
Beta-pinene	0.01 to 1 parts per thousand
Ethyl vanillin	0.01 to 1 parts per thousand
3,4,4a,5,8,8°-hydrohexa-3',7'-dimethylspiro(1,4-methano phthalene-2(1h)2'6 oxirane)	0.005 to 0.1 parts per thousand
Dimethyl cyclo hex-3-ene- 1-carboxaldehyde	0.001 to 0.1 parts per thousand
2,2,5-trimethyl-5-pentyl-cyclopentanone	0.001 to 0.1 parts per thousand
Maltol	0.01 to 1 parts per thousand

3. A mothproofing composition as claimed in claim 2, **characterized in that** it has the following formulation:

	Cedrenyl acetate	1
5	Eugenyl acetate	1,4
	Acetophenone	0,06
	Anisic aldehyde	1,2
	Methyl cinnamic aldehyde	1,6
10	Benzyl benzoate	30,2
	Cedryl Methyl Ether	11
	Atlas cedarwood oil	0,5
	Cedrol	2,5
	Cis-3-Hexenol	0,0003
15	Triethyl citrate	0,24
	Citronellol	0,03
	Coriander oil	0,8
	Coumarin	1,6
20	Delta-damascone	0,2
	Methyl dehydro jasmonate	0,14
	Dihydromircenol	20
	Dipropylene glycol	6,957
	1-(5,5-dimethyl-cyclohexane-1-yl)pent-4-en-1-one	0,0015
25	3-methyl-5-(2,2,3-trimethyl-3-cyclopentane-1-yl)-4-penten-2-ol	0,6
	Eugenol	1,5
	Iso-longipholanone	1,4
	Lavandin essential oil	2
30	Methyl atrarate	0,003
	Nutmeg oil	0,1
	2-methyl-4-propyl-1,3-oxathiane(z)	0,012
	Oxide rose L	0,0015
	Para-mentha-8-thiol-3-one	0,0001
35	Patchouli essential oil	14
	Alpha-pinene	0,005
	Beta-pinene	0,1
	Ethyl vanillin	0,6
40	3,4,4a,5,8,8°-hydrohoxa-3',7'-dimethylspiro(1,4-methano phthalene-2(1h)2'6 oxirane)	0,015
	Dimethyl cyclo hex-3-ene-1-carboxaldehyde	0,013
	2,2,5-trimethyl-5-pentyl-cyclopentanone	0,015
	Maltol	0,2066

45 4. Moth-proofing strips formed by impregnating a porous substrate with a composition as claimed in claims 1 to 3.

5. Moth-proofing strips as claimed in claim 4, wherein said porous substrate is formed of absorbent paper.

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EUROPEAN SEARCH REPORT

Application Number
EP 10 00 4992

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Place of search Munich		Date of completion of the search 15 July 2010	Examiner Bertrand, Franck
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 10 00 4992

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